

On page 5, delete the paragraph that begins on line 14 and ends on page 6, line 5, and then replace the deleted paragraph with the following replacement paragraph:

FIG. 2A is now presented to diagrammatically illustrate the structure of one possible embodiment of the present invention. FIG. 2A is a side plan, cross-sectional view of a portion of the bottom ceramic layer 202 of a multi-layered LTCC module 200. To provide an additional perspective view of the structure, FIG. 2B illustrates a top plan view of the bottom surface 212 of layer 202. As can be seen in FIG. 2A, a conductive trace 204, which is on the upper surface 201 of layer 202, is electrically connected to electrically conductive material within through-hole 206. Through-hole 206 is a passageway that passes through a substantial portion of the layer's thickness. The electrically conductive material within the through-hole 206 forms via 207. At the end of via 207, opposite conductive trace 204, is formed a catch pad 208. A conductive barrier cap 209 is formed in connection to catch pad 208. Barrier cap 209 forms an intermediate conductive material through which catch pad 209 is connected to the material forming contact (or solder) pad 210, which is formed on the bottom surface 212 of layer 202. Barrier cap 209 serves as a barrier that prevents chemical reactions from occurring between the material of via 207 and catch pad 208 with the material of contact pad 210. Layer 202 is typically the bottom layer of a laminate LTCC module. A ring of dielectric material 214 is formed on the bottom surface 212 of layer 202 such that the perimeter of the contact pad 210 and the portion of the ceramic layer 202 immediately surrounding the contact pad 210 is covered by the ring. Within the ring 214 and on the surface of the contact pad 210 is placed solder material 216. Solder 216 is used to attach the LTCC module 200 to an electronic substrate, such as a printed circuit board 218 (see FIG. 5). It is common to use a lead/tin composite material for the solder material 216. Again, FIG. 2B illustrates a plan view of the bottom surface 212 of layer 202 to provide a greater appreciation for the structural design of the specific embodiment of the present invention. In FIG. 2B, it can be seen that the perimeter of the ring 214 extends beyond the outer surface of the solder material 216. It is, however, not necessary that the outer perimeter of the dielectric ring 214 extend beyond the outer surface of the solder material 216.